

STEP-1:

- Hold the assembled gland straight and disassemble the parts as A,B,C,D and E.

STEP-2:

- Choose the optimal seal (flat or round) according to the cable diameter, shape which is going to be tightened.
(For triple seal combination it is enough to disassemble only part E.)

*Flangeless ring and spring are inside part A.

STEP-3:

- For double & seal combination part A is an opposite to tighten the desired cable.
Red rules will provide to complete the seal combination.

STEP-4:

- Assemble the seal combination:
Insert part A. Mount (parts A,C,D) on the enclosure with sufficient force value.

C Then mount part A and E engaged
D One or two threads for mounting nut inside the gland body.

STEP-5:

- Engage the seal combination into the enclosure with sufficient force value.

STEP-6:

- Tighten part E to parts A,C,D sufficient force value.

STEP-7:

- Insert the installed gland into the hole in the metal plate.

STEP-8:

- Secure the installation with a lockwasher and locknut.

5 SAFETY INSTRUCTION

Qualified personnel in compliance with the national laws shall carry out the maintenance in accordance with EN/IEC 60079-17 and installation in accordance with EN/IEC 60079-14.
-Changes to products are not allowed.
-Only Bimed spare parts must be used.
-Everyday and extraordinary maintenance operations must be carried out only by qualified personnel after approval from expert technicians.
-The maintenance operations must be carried out only after the engine has been cut off from mains or from the related electrical appliance.
-The following instructions must be strictly followed in order to get a correct installation.
-The national safety rules and accident prevention regulations must be strictly respected.

In case of ambient temperature is below -30°C, austenitic steels must be used according to EN10213-3 (Stainless steel AISI 316).
The clamping of the cables must be realized outside of enclosure by appropriate torque values to guarantee the mechanical characteristics. The cable glands are only suitable for fixed installations. Cables shall be effectively clamped to prevent pulling or twisting.

The cable gland installation shall be done according to safety manufacturer instructions to maintain degree of protection.
Cable gland installation shall be done taking into account the temperature range declared for cable glands in relation to protection mode execution, versus the ambient temperature process of installation.

When cable glands are installed with polyamide insert BDPX... mechanical risk must be taken into account, depending on cable gland and insert type. The upper operating temperature is limited to 75°C. When insert has to be removed in order to replace the cable, the integrity of sealing rings have to be checked. In order to guarantee the correct tightness. If necessary, sealing rings have to be replaced with new ones. Precautions shall be taken in order to guarantee protection against risk of mechanical damage is provided, when insert types are suitable for low mechanical risk (M, J, only).

Cable glands for non-circular cables shall be fitted with proper cables, suitable for sealing ring, according to manufacturer's instruction.
The certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in the 1st page of the manual.
-The certificate does not cover hazards coming from environmental conditions different from those clearly and precisely indicated in clause 1 of EN 60079-0.
Flat washer material should be same material with the inner sealing of the gland before temperature of the gland is raised to the material of the sealing ring but can additionally be limited by the material of the flat washer (range) accessories.

6 SAFETY INSTRUCTION (IP PROTECTION)

IP protection for Non Threaded enclosure applications

Thread	Min. Diameter (mm - max. mm)	Thread	Min. Diameter (mm - max. mm)	Thread	Min. Diameter (mm - max. mm)
M12x1.5	8.5-8.7	G 1/4"	13.7-13.8	PG 7	12.5-12.7
M16x1.5	12.0-12.2	G 3/8"	16.0-16.1	PG 9	15.0-15.4
M20x1.5	16.0-16.2	G 1/2"	20.0-20.2	PG 11	18.5-18.8
M25x1.5	20.0-20.2	G 3/4"	24.0-24.1	PG 13.5	20.0-20.3
M32x1.5	26.0-26.2	G 1"	30.0-30.1	PG 16	22.5-22.7
M40x1.5	32.0-32.2	G 1 1/8"	35.0-35.2	PG 20	25.0-25.3
M50x1.5	40.0-40.2	G 1 1/2"	42.0-42.1	PG 25	30.0-30.3
M63x1.5	50.0-50.2	G 2"	50.0-50.1	PG 36	37.0-37.3
M75x1.5	58.0-58.2	G 2 1/2"	62.0-62.1	PG 42	44.0-44.3
M90x1.5	68.0-68.2	G 3"	70.0-70.2	PG 48	50.0-50.3
M100x1.5	75.0-75.2	G 3 1/2"	80.0-80.1		
M110x1.5	85.0-85.2	G 4"	85.0-85.1		
M125x1.5	95.0-95.2	G 5"	100.0-100.1		
M140x1.5	105.0-105.2				
M160x1.5	120.0-120.2				

Recommended Hole Diameters for Non Threaded enclosure applications in relation with the used thread types are shown above.

For non-threaded enclosures it is recommended to use flat washer between the gland body and enclosure. The recommended wall thickness is 1.5 mm for non threaded enclosures. For non threaded enclosures, in case of enclosure wall thickness is equal or lower than 1.5 mm, Bimed flat washer should be used. Care must be taken in the choice of it if necessary. During the assembly it is recommended to rotate the locknut. If the assembly needs to be done by rotating the gland, then spring should be preferred.

7 SAFETY INSTRUCTION (IP PROTECTION)

Ingress Protection: In order to guarantee the specified IP68 rating, special oil shall be applied on at least two full threads before fitting the gland to the box. In any case you must pay attention to guarantee the metallic continuity. For threaded enclosures min. wall thickness must be equal to the thickness of the relevant flange.

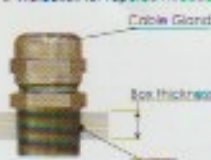
IP Protection for Cylindrical Threaded Joints

Ex d Execution:
- Assemble the gland with a ring of flat washer through the threaded hole.
- The wall has to be thick enough to engage of at least 5 full threads.
- The minimum engaged thread section must be of least 8 mm.

Ex e & Ex f Execution

- Assemble the gland with a ring of flat washer through the threaded hole.
- You have to respect the minimum wall thickness of 1.5 mm.

IP Protection for Tapered Threaded Joints



Ex d Execution:
- The wall has to be thick enough to engage of least 5 full threads.

Ex e & Ex f Execution:
- For Ex d applications please refer to NPT ANSI B1.20.1 standard.

NPT	Minimum Wall Thickness
1/4"	1.52
3/8"	1.52
1/2"	1.52
3/4"	1.52
1"	1.52
1 1/4"	1.52
1 1/2"	1.52
2"	1.52
2 1/2"	1.52
3"	1.52
3 1/2"	1.52
4"	1.52
4 1/2"	1.52
5"	1.52

8 OCTANS (EBU) SIZE TABLE

Outer Thread Size (Male)	Clamping Range			Torque			Port Number
	S1+S2+S3 min-max/min-max	S1+S2 min-max	S1 min-max	S1+S2+S3 min-max	S1+S2 min-max	S1 min-max	
M12x1.5	4-6 3-6 3-6 4-6	4-8 3-8 3-9 3-9	20 16 16 18	20 16 16 20	16 16 16 18	18 16 16 18	EBU03M EBU04M EBU05M EBU06M
M20x1.5	4-6 10-12 10-12 14-17	4-8 6-9 6-9 12-14.5	20 16 16 20	20 16 16 20	16 16 16 20	18 16 16 20	EBU07M EBU08M EBU09M EBU10M
M25x1.5	10-12 10-12 14-17 10-12	12-14.5 12-14.5 17-20 12-14.5	20 16 20 20	20 16 20 20	16 16 20 16	18 16 20 18	EBU11M EBU12M EBU13M EBU14M
M32x1.5	14-17 22-24 14-17 22-24	20-24 27-29 17-20 20-24	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU15M EBU16M EBU17M EBU18M
M40x1.8	22-24 26-28 22-24 26-28	24-27 26-30 24-27 26-30	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU19M EBU20M EBU21M EBU22M
M50x1.8	26-28 26-28 26-28 26-28	26-31 26-31 26-31 26-31	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU23M EBU24M EBU25M EBU26M
M63x1.8	26-28 44-48 26-28 26-28	26-32 46-52 26-32 26-32	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU27M EBU28M EBU29M EBU30M
M75x1.5	44-51 44-51 44-51 44-51	51-56 51-56 51-56 51-56	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU31M EBU32M EBU33M EBU34M
M90x1.5	44-51 75-78 44-51 44-51	51-56 70-75 51-56 51-56	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU35M EBU36M EBU37M EBU38M
M100x1.5	44-51 75-78 44-51 44-51	51-56 70-75 51-56 51-56	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU39M EBU40M EBU41M EBU42M
M118x1.5	44-51 85-88 44-51 44-51	51-56 85-91 51-56 51-56	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU43M EBU44M EBU45M EBU46M
M138x2.0	44-51 95-98 44-51 44-51	51-56 95-100 51-56 51-56	20 20 20 20	20 20 20 20	16 16 20 16	18 16 20 18	EBU47M EBU48M EBU49M EBU50M
M150x2.0	105-108 105-108 105-108 105-108	126-131 126-131 126-131 126-131	420 420 420 420	420 420 420 420	420 420 420 420	420 420 420 420	EBU51M EBU52M EBU53M EBU54M